

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

Amendment of Parts 1, 21, 73, 74 and 101 of
the Commission's Rules to Facilitate the
Provision of Fixed and Other Advanced
Services in the 2150-2162 and 2500-2690
MHz Bands

Transforming the 2.5 GHz Band

WT Docket No. 18-120

**COMMENTS OF
NORTHERN ARIZONA UNIVERSITY FOUNDATION, INC.**

The Northern Arizona University Foundation, Inc. ("NAUF") submits these comments in response to the above-referenced Notice of Proposed Rulemaking, released May 10, 2018 ("*Notice*").¹

NAUF is a 501(c)(3) non-profit corporation that manages private contributions to Northern Arizona University ("NAU"), a public university, in order to assist NAU in offering expanded educational opportunities and program offerings to students in Arizona, the Southwest Region, United States and beyond. NAUF is a member institution of the National EBS Association ("NEBSA"). NAUF has had the opportunity to review and supports the NEBSA/Catholic Technology Network Comment. NAUF addresses herein further points for consideration and discussion by the Commission to assist in its analysis of further rulemaking.

¹ By order released on June 21, 2018, the Commission extended the comment and reply comment deadlines by 30 days to August 8, 2018 and September 7, 2018, respectively.

I. NAUF/NAU History.

NAUF was an early entrant into the Educational Broadband Service (“EBS”) community. NAUF recognized the EBS opportunity as a way to support NAU’s mission to serve rural Arizona and Native Americans and to provide affordable access to higher education for all through high quality, innovative educational programs and outreach activities that engage with Arizona’s citizens and communities. Increasing access to high-quality, affordable education is a top priority if Arizona is to compete successfully in a global economy. From early outreach to satellite campuses throughout rural and metropolitan cities in Arizona, NAUF’s EBS program facilitated NAU’s development of its current 30 campus locations including rural areas of Yuma, Yavapai County, and Prescott.

In the intervening years, NAU developed NAU Extended Campuses, now NAU Online, which delivers a distinct, premier online education experience that is adapted to the needs of time- or place-bound learners and utilizes the latest educational technology while staying true to NAU’s longstanding commitment and personalized approach to teaching and learning. NAU Online comprises a longstanding network of campus locations and instructional sites across Arizona and online, where students can take classes as part of NAU’s extensive portfolio of blended programs. Learners at these locations account for approximately one-third of NAU’s total student population. These blended programs are offered at all of NAU’s diverse campus locations in high-demand fields such as teacher education, criminal justice, health sciences and nursing, among others. NAU Online offers more than 90 online or blended degree, certificate, and degree completion programs to ensure affordable, accessible pathways to a post-secondary and/or graduate credential.

NAU offers a nationally recognized competency-based Personalized Learning (PL) program, providing access to a high-quality, affordable college education designed to meet the

needs of working professionals. PL programs are broken down into modules or lessons, enabling learners to put their real-world experience to work for them. Based on their subject knowledge level in various areas, students can progress through certain lessons quickly or move at a slower pace when learning new topics. Degree programs include: Computer Information Technology, Liberal Arts, Management (with emphases in Human Resources or Healthcare), Nursing — RN to BSN, and Small Business Administration. The success of these programs can be traced back to those early years and NAUF's entry into the EBS community.

a. Economic Impact.

NAUF's EBS program grew from nine original licenses to its current holdings of twenty-eight, nineteen of which were purchased with our commercial partner. NAUF is a national licensee and the lease revenue received comprises approximately 40% of its overall revenue. This revenue in turn supports approximately 57% of NAU's development operations – a key metric in today's environment of substantially decreased state-funding for public universities such as NAU. This support is vital to sustaining NAU's unique programs that address the needs to rural, Tribal and other underserved populations.

II. Notice Assessment.

NAUF welcomes the Commission's decision to license unassigned EBS spectrum, commonly referred to as EBS white space. As the footprint of EBS coverage across the United States has remained nearly unchanged since 1995, NAUF recognizes that many education, Tribal and local government community affiliates have been unable to utilize the EBS spectrum in large areas of the country. Despite encouragement from NEBSA, the Commission has not moved forward to license EBS white space or to adopt appropriate rules that would expand the benefits

of EBS to more educational institutions and accelerate the deployment of commercial 5G wireless networks to more Americans, particularly in rural areas.

As the *Notice* recounts, the Commission has created a flexible structure and process for EBS that has supported both educational use and a stable secondary market for commercial broadband services in the 2.5 GHz band. *Notice* at ¶ 10. NAUF, however, is concerned about some of the proposals put forth by the Commission on how best to license unassigned EBS regime. The *Notice* solicits comment on a variety of other topics that, in essence, would bring about significant and more importantly in the view of NAUF, detrimental changes to the EBS spectrum. For instance, the Commission asks whether it should eliminate EBS educational use and eligibility requirements and whether there are other ways to restructure the 2.5 GHz band to ensure that it is put to its highest and best use. *Notice* at ¶¶ 19-22, 58. The Commission also seeks comment on other approaches to transform the band, including the possibility of conducting an incentive EBS auction. *Notice* at ¶ 61.

NAUF recognizes action regarding the licensing of unassigned EBS white space may be overdue, including some revision to current EBS rules. However, the Commission should be careful to not “throw the baby out with the bath water” in its attempt to transform the band. NAUF believes that a complete transformation of the 2.5 GHz band is neither necessary nor in the public interest.

One focus of the Notice seems to conclude the current *licensed* EBS spectrum is underutilized. *Notice* at ¶¶ 10, 19, 58. NAUF notes that current EBS licensees provide educational services to their constituents and many commercial carriers are able to operate competitive networks using leased EBS spectrum. A win-win. NAUF is certainly one of those EBS licensees. NAUF believes the Commission’s existing rules already provide EBS licensees and commercial

broadband service providers with great flexibility to use the 2.5 GHz band efficiently and for a wide variety of purposes. NAUF believes it is likely that underutilization exists as a result of the fact that twenty plus years of inaction has left mostly rural geographic areas unserved or underserved where EBS has never been licensed.

III. Existing Flexible Use Rules Have Provided EBS Licensees such as NAUF Tremendous Outreach Opportunities.

As noted above, NAUF was an early entrant into the EBS community. The existing flexible use rules facilitated NAU's outreach into many of the most rural parts of Arizona, providing higher education opportunity through the EBS Spectrum. Further, the existing flexible use rules have fostered NAUF's partnership with a commercial carrier that has provided significant financial support for NAUF's mission of supporting NAU.

NAUF notes that the Commission encouraged EBS licensees to lease up to 95% of their spectrum for commercial use in an effort to maximize flexibility while at the same time safeguarding the educational purpose of EBS.² Further, in 2004, the Commission took additional steps to maximize the use of EBS that provided more flexibility to EBS licensees such as NAUF and their commercial lessees.³ The Commission's steps in this regard strengthened NAUF's public-private partnership opportunities, allowing the furtherance of NAU's outreach goals.

NAUF believes the Commission's actions to date provides EBS licensees such as NAUF the many options needed for education with respect to their EBS licenses. NAU, through NAUF's

² *Report and Order*, MM Docket No. 97-217, 13 FCC Rcd 19112, 19159 (¶¶ 89-90) (1998) (the 5% reservation should maximize flexibility to design systems to meet varied needs and maximize spectrum available for leasing while maintaining sufficient capacity for educational use).

³ *See e.g., Notice of Inquiry*, Gen. Docket No. 09-157, 24 FCC Rcd 11322, 11328-29 (¶ 27) (2009) ("The Commission has taken additional steps to make spectrum with incumbent licensees available for new uses. For example, the Commission has repurposed [2.5 GHz] spectrum by modifying technical and service rules to allow incumbents to provide new services or to free up spectrum for additional licensees or users.")

EBS licenses, uses these services not only to deliver broadband access to the classroom, but for a variety of other educational purposes that are permitted under the Commission's existing rules. Additionally, our commercial partner acquires the flexibility they need to take full advantage of technological and business opportunities in the marketplace. Should the Commission change the current EBS regime, NAUF believes the original goal of supporting the important interests of education would be greatly diminished, if not lost altogether.

The success of the Commission's current flexible use rules is particularly evident for NAUF and NAU. NAUF and its commercial partner are excellent examples of the benefits that allow for NAUF to support NAU Online and its distributed learning at more than 30 campuses throughout Arizona, as well as NAU's PL program. Additionally, through the development support that NAUF's EBS lease revenue provides, NAUF has been able to provide NAU with needed resources to support its unique commitment as the leading university serving Native American communities. The Office of Native American Initiatives (ONAI) was established to make substantial and enduring contributions to a new era in American Indian self-determination by building partnerships with Native American communities. NAU is a vital partner to 22 tribal communities across the state of Arizona, enrolling more than 1,500 students from 128 tribal communities in the United States, and an increasing number of international, indigenous communities.

Clearly, NAUF's public-private partnership has been vital to NAUF's mission to support NAU through development and management of private contributions. As such, NAUF does not believe a wholesale transformation of the flexible use rules that could decrease or eliminate the current benefits of the existing EBS regulatory regime makes sense in light of the resounding success for EBS licensees such as NAUF.

The public-private partnerships facilitated by the Commission's policies have served another critical purpose - providing financial support for educational institutions which can no longer rely on federal assistance or other government funding. NAU, like many other public universities, is plagued by consistently decreasing state funding. As a result, NAU must rely more heavily on NAUF to develop funding resources to meet the needs of today's students and the programmatic needs of its diverse community and commercial partners. As an example, the lease revenue NAUF receives helps provide development support for NAU's Tribal Leadership Initiative. NAU provides training and support for current and future tribal leaders across the United States and Canada through graduate curricula, executive education, youth leadership programs and fellowships. NAUF's EBS lease revenue also provides development support for NAU's *DINÉ Institute*, an innovative K-12 teacher professional development that elevates curricular rigor and strengthens culturally responsive teaching in public, Bureau of Indian Education, and tribally-controlled schools across Navajo Nation, in partnership with the Yale National Initiative/Yale University. Development support of these innovative programs has facilitated NAU's enrollment of Native American students as referenced above, helped establish indigenous exchange partnerships with other leading universities such as the University of Tasmania and University of Melbourne and more broadly build international networks to address global under-representation of indigenous students in higher education.

IV. Existing EBS Geographic Services Areas Should be Revised.

NAUF notes that it has significant challenges with respect to its geographic service areas ("GSAs") and supports the Commission's proposal to make changes. *Notice* at ¶ 11. The current methodology where GSAs are designated by circles around a center-point, can result in lack of access, particularly in rural and remote areas. However, while NAUF concurs with and supports

any reasonable rationalization process, it does so provided that coverage of existing GSAs held by EBS licensees is not reduced. Such reductions would disrupt the existing services provided by NAUF and other EBS licensees and their commercial partners.

V. Current EBS Licensees and Leasing Partnerships Should Not be Disrupted.

NAUF strongly believes that in light of its success and the success of other EBS licensees in the existing EBS regulatory model and the ongoing reliance on that model by educators and wireless carriers alike, the Commission should take particular care to ensure that new rules adopted in this proceeding do not disrupt these current arrangements. Should NAUF's current EBS program be disrupted, it will have a significant negative economic impact on its ability to support of NAU through substantial development opportunities – opportunities that support student success through scholarships and program support such as those noted above.

VI. EBS Licenses Should Maintain their Educational Purpose.

NAUF fully believes the Commission should continue to adopt a regime that supports its original educational purpose. Allowing direct commercial entrance into the EBS system could not only foreclose future educational opportunities for licensees but also disrupt the existing and very successful EBS licensing and leasing model.

NAUF notes EBS is the only spectrum specifically set aside for educators to be used in furtherance of their educational missions. Had this not been the case when originally adopted by the Commission, licensees such as NAUF would not have been able to take advantage of the significant opportunities such a regime provided. As often happens, when educators aren't provided realistic options and must compete against better funded "opponents," they cannot do so successfully. That certainly could have been the result with NAUF as any attempt to compete against well-funded commercial entities would have likely precluded our entry into the EBS

community. By ensuring educators secured a viable option, the Commission furthered important private funding and resources for education without government support. Such a result has been clearly in the public interest.

VI. The Educational Nature of EBS Should be Preserved.

NAUF strongly believes the existing regulatory model governing the 2.5 GHz band has resulted in successful private-public partnerships that benefit educators, students, commercial wireless service providers, and consumers. As such, any changes adopted by the Commission should maintain the educational nature of EBS.

VII. Conclusion.

The existing EBS regulatory model has worked very well for NAUF. As stated above, the facilitation of NAU's rural and Tribal outreach, as well as the revenue generation to support many of NAU's programs, has been of critical importance to NAUF. We also believe flexible use rules are already in place that have not only fulfilled the educational purpose of the EBS regime, but facilitated unique public-private partnerships that have reaped significant public benefit rewards.

Respectfully submitted,

NORTHERN ARIZONA UNIVERSITY FOUNDATION, INC.

By:



Pamela Hillman

Interim Executive Director

Northern Arizona University Foundation, Inc.

P.O. Box 4094

Flagstaff, Arizona 86011

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